AMENDMENTS

In the Specification:

Please replace the paragraph beginning on page 10, line 16 with the following:

Neonatal blood samples from 72 different newborns were isolated and amplified with gene-specific primers denoted ARDC100-109 in Table 1 below. These five primer pairs contain reactive amine groups corresponding to the C6 amino modifications from Glen Research (Sterling, VT), that allow specific attachment of the amplicons to microarray substrate. The "N" position in each oligonucleotide sequence in Table 1 below denotes the C6 amino modification. The primers pairs encompass five discrete genomic segments corresponding to a total of three human genes: beta globin (β-globin), Cystic Fibrosis Transmembrane Conductance Regulator (CFTR), and Galactose-1-phosphate uridyltransferase (GALT). The diseases associated with the β-globin, CFTR and GALT genes in human are Sickle Cell Anemia, Cystic Fibrosis and Galactosemia, respectively. The genomic segments encompassed five disease loci in the three genes and the approximate size of each amplicon was 60 base pairs. The total volume of each PCR reaction was 50 µl.

Please replace Table 1 beginning at page 11, line 13 with the following:

Table 1. PCR primers used to amplify genomic segments

Primer I.D.	Description	Sequence
ARDC-100	Sickle Cell C allele 5'	5' NAAACAGACACCATGGTG CAC 3' (SEQ ID NO:1)
ARDC-101	Sickle Cell C allele 3'	5' NCCCACAGGGCAGTAACGGCA 3' (SEQ ID NO:2)
ARDC-102	Sickle Cell E allele 5'	5' NGCAAGGTGAACGTGGATGAA 3' (SEQ ID NO:3)
ARDC-103	Sickle Cell E allele 3'	5' NGTAACCTTGATACCAACCTG 3' (SEQ ID NO:4)
ARDC-104	Cystic Fibrosis ΔF508 allele 5'	5' NCTGGCACCATTAAAGAAAAT 3' (SEQ ID NO:5)
ARDC-105	Cystic Fibrosis ΔF508 allele 3'	5' NTTCTGTATCTATATTCATCA 3' (SEQ ID NO:6)
ARDC-106	GALT Q188R 5'	5' NTGGGCTGTTCTAACCCCCAC 3' (SEQ ID NO:7)
ARDC-107	GALT Q188R 3'	5' NAACCCACTGGAGCCCCTGAC 3' (SEQ ID NO:8)
ARDC-108	GALT N314D 5'	5' NCCACAGGATCAGAGGCTGGG 3' (SEQ ID NO:9)

ARDC-109	GALT N314D 3'	5' NGGTAGTAATGAGCGTGCAGC 3' (SEQ ID NO:10)

Please replace Table 2, beginning at page 14, line 1 with the following:

Table 2. Mixtures of synthetic oligonucleotides

Mixture	Oligonucleotide I.D.	Oligonucleotide Sequence*
1	ARDC-110	3GACTCCTG(A/T)GGAGAA (SEQ ID NO:11)
	ARDC-111	5GACTCCTA(A/T)GGAGAA (SEQ ID NO:12)
	ARDC-112	5TGGTGGTGAGGCCCT (SEQ ID NO:13)
	ARDC-113	3TGGTGGTAAGGCCCT (SEQ ID NO:14)
	ARDC-114	3ATCATCTTTGGTGTT SEQ ID NO:15)
	ARDC-115	5TATCATCGGTGTTTC (SEQ ID NO:16)
	ARDC-116	5CACTGCCAGGTAAGG (SEQ ID NO:17)
	ARDC-117	3CACTGCCGGGTAAGG (SEQ ID NO:18)
	ARDC-118	3CAACTGGAACCATTG (SEQ ID NO:19)
	ARDC-119	5CAACTGGGACCATTG (SEQ ID NO:20)
2	ARDC-125	BGACTCCTG(A/T)GGAGAA (SEQ ID NO:21)
	ARDC-126	BTGGTGGTAAGGCCCT (SEQ ID NO:22)
	ARDC-127	BATCATCTTTGGTGTT (SEQ ID NO:23)
	ARDC-128	BCACTGCCGGGTAAGG (SEQ ID NO:24)
	ARDC-129	BCAACTGGAACCATTG (SEQ ID NO:25)
	ARDC-135	DGACTCCTA(A/T)GGAGAA (SEQ ID NO:26)
	ARDC-136	DTGGTGGTGAGGCCCT (SEQ ID NO:27)
	ARDC-137	DTATCATCGGTGTTTC (SEQ ID NO:28)
	ARDC-138	DCACTGCCAGGTAAGG (SEQ ID NO:29)
	ARDC-139	DCAACTGGGACCATTG

*All sequences shown are 5' to 3' from left to right. 3 denotes Cy3; 5 denotes Cy5; B denotes biotin; D denotes dinitrophenol.